CLAIMS

WE CLAIM:

5 1. A method comprising:

characterizing an I/O model; creating a set of behavioral models based on the characterizing; and comparing the set of behavioral models to the I/O model.

- 10 2. The method of claim 1, further comprising:
 - selecting a simulator input fragment for the characterizing.
 - 3. The method of claim 1, wherein the characterizing further comprises: calculating a driver output open circuit voltage.

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- 4. The method of claim 1, further comprising: calculating a driver equivalent output impedance.
- 5. The method of claim 1, wherein the comparing further comprises:
- creating decks comprising a net topology for the I/O model and the set of behavioral models;

simulating the decks; and comparing output from the simulating.

25 6. An apparatus comprising:

means for selecting a simulator input fragment; means for characterizing an I/O model using the simulator input fragment; means for creating a set of behavioral models based on the characterizing; and means for comparing the set of behavioral models to the I/O model.

- 7. The apparatus of claim 6, wherein the means for comparing further comprises:

 means for creating decks comprising a net topology for the I/O model and the set of behavioral models;
- 5 means for simulating the decks; and means for comparing output from the simulating.

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- 8. The apparatus of claim 6, wherein the means for characterizing further comprises: means for calculating current-voltage curves for driver output.
- 9. The apparatus of claim 6, wherein the means for characterizing further comprises: means for calculating voltage curves for an initial high driver model.
- 10. The apparatus of claim 6, wherein the means for characterizing further comprises:
 means for calculating driver book delays.
 - 11. A signal-bearing medium encoded with instructions, wherein the instructions when executed comprise:

selecting a simulator input fragment;

characterizing an I/O model using the simulator input fragment;
creating a set of behavioral models based on the characterizing; and
comparing the set of behavioral models to the I/O model, wherein the comparing
further comprises:

creating decks comprising a net topology for the I/O model and the set of behavioral models,

simulating the decks, and comparing output from the simulating.

12. The signal-bearing medium of claim 11, wherein the characterizing further comprises:

calculating a high-to-low receiver threshold voltage.

5 13. The signal-bearing medium of claim 11, wherein the characterizing further comprises:

calculating a low-to-high receiver threshold voltage.

14. The signal-bearing medium of claim 11, wherein the characterizing furthercomprises:

calculating input impedance.

- 15. The signal-bearing medium of claim 11, wherein the characterizing further comprises:
- 15 calculating input capacitance.
 - 16. A computer system comprising:

a processor; and

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a storage device encoded with instructions, wherein the instructions when executed on the processor comprise:

selecting a simulator input fragment comprising configuration information,

characterizing an I/O model using the simulator input fragment, creating a set of behavioral models based on the characterizing, and comparing the set of behavioral models to the I/O model, wherein the comparing further comprises:

creating decks comprising a net topology for the I/O model and the set of behavioral models,

simulating the decks, and

comparing output from the simulating.

- 17. The computer system of claim 16, wherein the characterizing further comprises: calculating receiver input slop compensation numbers.
- 18. The computer system of claim 16, wherein the characterizing further comprises: calculating dynamic receiver input noise thresholds.
- 19. The computer system of claim 16, wherein the behavioral models are independent ofcycle time, input pattern, and process points.
 - 20. The computer system of claim 16, wherein the instructions further comprise: selecting a base skeleton file comprising process, voltage, temperature, and rise/fall times.

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